contained in the arbitrator's report would prohibit the Incumbent from meeting the $24.95 flat price strategy.[102]

Q. DO YOU THEN OPPOSE OFFERING A WHOLESALE DISCOUNT TO RESELLERS?

A. No. A wholesale discount equal to net avoided retailing costs can be economically efficient if retail prices also reflect economic costs. Unfortunately they do not. Double discounting only compounds the inefficiencies and creates additional opportunity for arbitrage. From an economic standpoint, resellers should either be permitted to aggregate demand and buy from the discounted retail tariff, or be afforded a wholesale discount related to avoided retailing costs, but not both. Since the FCC has adopted the avoided cost standard for wholesale pricing, it should not require LECs to subtract that discount from volume discounted prices.

Q SHOULD THE AVOIDED COST WHOLESALE DISCOUNT APPLY TO U S WEST'S RESIDENTIAL RETAIL RATE (1FR)?

A. No. The 1FR retail rate is already priced below cost, so U S WEST should not be required to apply an avoided cost discount and sell the service even further below cost. Until U S WEST is able to rebalance rates so they cover full economic costs, the Commission should approve wholesale tariff rates at the retail rate for all services which have retail prices that are below cost. (This section of the testimony was supposed to discuss flaws in the FCC's default proxy wholesale discounts and the inefficiencies which would be caused by using the FCC's discount. Because of the stay, I have moved this portion of my testimony into the appendix.) Whether this portion of the FCC Order is ultimately overturned or not I urge the Commission to establish a wholesale discount rate

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[102] California Public Utilities Commission, "Draft Decision and Opinion," Application No. 96-08-040, November 27, 1996, pg. 9.

based on U S WEST's actual avoided cost studies, rather than on the FCC proxy prices or MCI's flawed study which is very similar to the FCC proxy prices.

IX. PRICING OF CALL TERMINATION

Q. WHAT IS YOUR VIEW OF THE REQURIEMENT IN THE COLORADO PUC'S RULES THAT BILL AND KEEP BE USED AS A METHOD OF COMPENSATION FOR CALL TERMINATION?

A. The central tenet of economics is that prices play a critically important role in the allocation and distribution of goods and services in a market economy. Bill and keep violates that principle.[103] Unless traffic between two carriers is in balance and/or the cost of terminating that traffic is equal, bill and keep is economically inefficient because carriers and their customers do not pay for the costs they generate from originating calls. Even if costs are in balance in the short term, bill and keep is economically inefficient because it provides an incentive for carriers to overuse what is essentially a free good– call termination services from the other carrier.

Q. IS BILL AND KEEP A REASONABLE COMPENSATION METHOD IN A COMPETITIVE TELECOMMUNICATIONS MARKET?

A. It is not. As a means of compensation for terminating traffic among non-competing LECs, bill and keep was born in the regulated franchise environment. There was no pretense that traffic or costs between any two interconnecting LECs would be balanced,

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[103] Under bill and keep, carriers do not pay each other for terminating calls. Suppose General Motors provides engines to Chrysler, while Chrysler provides transmissions to GM. Under a bill and keep system, there would be no exchange of money between Chrysler and GM; they would just "barter" engines for transmissions, with neither party paying the other even if one party started demanding an unbalanced supply of the other's respective automobile parts. In fact, though, this is not even a bartering system, because even bartering assumes an equal exchange of value.

only that each would be made whole for its costs through the revenue requirement, ratemaking and separations process. The situation is completely different in a competitive local exchange market. Bill and keep would distort economic incentives and promote "cherry picking".

Q. CAN YOU EXPLAIN HOW BILL AND KEEP PROMOTES CHERRY-PICKING?

A. Yes. If LEC B pays nothing for calls terminated on the network of LEC A, LEC B has an incentive to target customers who have high levels of outgoing calls rather than incoming calls. A call originating from a customer of LEC B generates revenues for LEC B from the customer, but LEC B does not have to pay any costs to LEC A if the call is terminated on A's network. Hence, LEC B will target customers such as telemarketers who have large volumes of outgoing calls, and very little incoming traffic.

Of course, LEC A would have a similar incentive. However, if LEC A is the incumbent provider, such as U S WEST, it could not act on these incentives for two reasons. First, U S WEST cannot target only those customers with calling patterns that it finds attractive. As the incumbent carrier, U S WEST bears the carrier of last resort obligation. All customers that other carriers find unprofitable will remain with U S WEST and U S WEST must serve them. Hence, U S WEST is vulnerable to cherry picking, while its competitors are not. Second, U S WEST is, for now, the largest LEC in its region. Therefore, even if, in spite of its carrier of last resort obligation, U S WEST manages to successfully market its service to high volume call originators, it is significantly more likely that a call originating on a competitor's network will terminate on U S WEST's network than that it will terminate on its own network. For U S WEST, it is significantly more likely that a call originating on its own network will terminate on its own network than on that of a smaller rival. Hence, under bill and keep, U S WEST will bear the costs

of terminating its own calls, reducing U S WEST's incentive to select customers who are high volume call originators.

Q. CAN YOU ELABORATE ON HOW ECONOMIC EFFICIENCY IS REDUCED BY CHERRY-PICKING?

A. Aside from the obvious inequity of cherry-picking, it is also inefficient for two other reasons. The higher price per call imposed on the incumbent's customers will induce them to make fewer calls, and could induce some to drop off the network. The lower price per call for those with high levels of outgoing calls will induce them to increase their calling even more, beyond that which would be efficient given the costs imposed on the system. The net effect over all customers could be a higher or lower total usage on the network, but it will certainly be an inefficient pattern of usage, where some customers, like telemarketers and other high-originating users, will be encouraged to overuse the system due to the subsidy from other consumers, and others like typical residential users, will be discouraged from using the system due to the subsidy they pay to finance bill and keep.

Q. IS "BILL AND KEEP" USED IN OTHER INDUSTRIES?

A. The use of bill and keep is without empirical foundation in a market economy. There are countless instances in which two businesses provide services to each other. In most cases, businesses price those services and collect payment based on the actual volume of services provided, just as they would any other customer. In a few cases – when bartering is involved – firms trade services in kind, without exchanging money payment; even then, the firms keep an account of what has been provided by each party to the exchange, so each party knows what is "owed" the other party. In other words, mutual compensation is not observed as a business practice in competitive industries.

Nor is an equivalent method of reciprocal compensation used in any other network industry: railroads interchange carloads with each other by the thousands, but they do not assume their traffic interchanges will be balanced. Instead, they negotiate interchange rates, effectively pricing the services they provide for each other. Similarly, long distance carriers such as AT&T have interchange agreements with carriers in other nations, which provide for "accounting rates" for compensating the reciprocal termination of each others' traffic; e.g., AT&T pays France Telecom for terminating AT&T's calls in France and France Telecom pays AT&T for terminating its calls in the U.S. The net telephone service settlement deficit of U.S. carriers grew from $347 million in 1980 to $3.3 billion in 1991; settlements represent more than half of the charge for an international telephone call.[104] No interexchange carrier uses "mutual traffic exchange" in lieu of money compensation for handling such traffic.

Q. DOES THE FCC ORDER RECOGNIZE THE DISTINCTION BETWEEN TANDEM/TRANSPORT AND END OFFICE TERMINATION?

A. Yes, it explicitly recognizes that transport and termination (end office switching) are separate, distinct services:

> We conclude that transport and termination should be treated as two distinct functions. We define "transport"... as the transmission of terminating traffic that is subject to section 251(b)(5) from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party (or equivalent facility provided by a non-incumbent carrier).[105] We define "termination"... as the switching of traffic that is subject to section 251(b)(5) at the terminating

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[104] Trends in the International Communications Industry, Federal Communications Commission, Industry Analysis Division, Common Carrier Bureau, March 1994, p. 47.

[105] FCC Order, paragraph 1039.

> carrier's end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party's premises... As such, we conclude that we need to treat transport and termination as separate functions - each with its own cost.[106]
>
> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch.[107]

Q. WOULD A RECIPROCAL COMPENSATION PLAN WHICH IGNORES THE SEPARATE COSTS OF TRANSPORT AND TERMINATION BE CONSISTENT WITH ECONOMIC EFFICIENCY OR THE FCC ORDER?

A. No, it would not. So long as new entrants continue to serve a relatively small geographic area, with their own facilities, compared to the area served by U S WEST, then U S WEST might be required to receive new entrant-originated local calls at its tandem switch(es), and carry those calls over its transport facilities to distribute them to its many end office switches serving the called end user. If new entrants elect to use U S WEST's tandem/transport facilities, they should be required to pay for the costs caused. Otherwise, the choice by new entrants to use U S WEST facilities, versus building their own transport facilities or buying transport services from third-parties,[108] would be distorted. Moreover, even if local exchanged traffic between a new entrant and U S WEST were balanced, the costs would not be, since the entrant would be imposing

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[106] FCC Order, paragraph 1040.

[107] FCC Order, paragraph 1090.

[108] FCC Order acknowledges that "Many alternative arrangements exist for the provision of transport between the two networks." FCC Order, paragraph 1039.

transport costs on U S WEST while the new entrant was only incurring the costs of call termination for calls received from U S WEST.

Q. IS THE COSTING METHODOLOGY U S WEST IS USING TO SUPPORT ITS PROPOSED TRANSPORT AND TERMINATION PRICES TO THE OTHER PARTIES CONSISTENT WITH THE FCC ORDER AND ECONOMIC PRINCIPLES OF COSTING?

A. The costing methodology adopted by U S WEST and described in the testimony of Garrett Y. Fleming is consistent both with economic costing principles and the FCC Order:

> [W]e conclude that states that elect to set rates through a cost study must use the forward-looking economic cost-based...[109]

The FCC Order also specifically provides for use of incremental cost studies in setting transport and termination prices for local interchanged traffic:

> In arbitration proceedings, states must set the price for end office termination of traffic by... using a forward-looking, economic cost study that complies with the forward-looking, economic-cost methodology set forth...[110]

Furthermore, the U S WEST TELRIC costing methodology is consistent with the economic-cost methodology set forth in the FCC Order in that it:

- includes only those costs which are caused by the provision of transport and termination respectively;[111]

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[109] FCC Order, paragraph 1056. The FCC further articulates its rules regarding in the estimation of TSLRIC, or TELRIC in paragraphs 673-711, of FCC Order.

[110] FCC Order, paragraph 1060.

[111] FCC Order, paragraph 672.

- uses an appropriate risk-adjusted cost-of-capital;[112]
- employs economic depreciation rates;[113]
- does not include any markup for recovery of the costs of U S WEST's "universal service" obligations.[114]

As I previously explained in Section VI.F, I have worked with U S WEST in the development and implementation of its economic costing methods and have reviewed the U S WEST cost studies that provide the basis for its proposed prices of call termination and transport of interchanged local traffic. The fundamental economic premise of these studies is that the incremental costs of transporting or terminating calls in the long run is caused by the incremental capacity burden imposed on the system by the interchanged traffic. U S WEST has analyzed traffic flows during typical busy hours for switching offices to determine the most technologically efficient means of providing capacity. This forms the basis for the capacity cost analysis, and is consistent with the notion of forward looking costs. Incremental costs of billing are also included in U S WEST 's cost measures, as is appropriate because these are costs that must be recovered under cost-based pricing.

Q. IS IT APPROPRIATE FOR THE PRICES OF LOCAL CALL TRANSPORT AND TERMINATION TO INCLUDE SOME ALLOCATION OF U S WEST'S JOINT AND COMMON COSTS?

A. Yes. In competitive markets, all multi-product firms recover their joint and common costs by setting their prices above incremental costs. U S WEST should also be allowed

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[112] FCC Order, paragraph 702.

[113] FCC Order, paragraph 702.

[114] FCC Order, paragraph 712.

to recover a reasonable share of its shared and common costs by pricing transport and terminating services to include an allocation of those shared and common costs. The Order explicitly recognizes that economic efficiency dictates the recovery of shared and common costs and specifically provides for prices of local interchange transport and termination services to include a reasonable allocation of those costs:

> Rates for termination established pursuant to a TELRIC-based methodology may recover a reasonable allocation of common costs. A rate equal to incremental costs may not compensate carriers fully for transporting and terminating traffic when common costs are present.[115]

Q. COULD YOU PLEASE SUMMARIZE YOUR TESTIMONY ON THE PRICING OF LOCAL TRAFFIC INTERCHANGED BETWEEN THE OTHER PARTIES AND U S WEST?

A. Economically efficient pricing of call transport and termination should cover all of U S WEST's long-run incremental costs causally attributable to transport and termination and make a reasonable allocation of U S WEST's common costs. U S WEST's proposed prices for transport and call termination are based on TELRIC cost studies and allow for a reasonable allocation of common costs, pursuant to the FCC Order regarding mutual compensation.

X. CONCLUSION

Q. WOULD YOU PLEASE SUMMARIZE YOUR CONCLUSIONS?

A. This proceeding involves far more than the private interests of the new entrants and U S WEST. The public too has a vital interest in the outcome of this proceeding. The ubiquitous telecommunications network is the backbone of the national information

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[115] FCC Order, paragraph 1058.

infrastructure, the "central nervous system" of the information economy. U S WEST has invested billions of dollars in that infrastructure under a very different regulatory regime. Now, the nation has embarked on a new course in telecommunications, toward open competition and interconnection as the means of stimulating further investment in the infrastructure and even greater innovation of new services and technologies. However, make no mistake about it: unless the prices of network elements and the wholesale prices of resale services cover their respective economic costs, entrants will make biased choices, buying existing facilities rather than building new ones. In so doing, the future of the nation's information infrastructure is put at risk.

There is no need to take such risk. By approving an agreement that is balanced and fair to all parties, the Commission can advance the cause of competition while preserving economic incentives for investment and innovation. By approving interconnection prices that are sufficient to cover full economic costs, the Commission can ensure that entrants will make efficient choices to "build or buy," because they pay the true social costs of their decisions. By approving an agreement that allows U S WEST to put reasonable restrictions on the use of unbundled network elements and does not require that U S WEST offer wholesale discounts on services that have retail prices below cost, the Commission can reduce the incidence of pure price arbitrage and its consequential harm to stakeholders such as the customers and shareholders of U S WEST.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

XI. APPENDIX: ANALYSIS REMOVED FROM THE BODY OF THE TESTIMONY TO REFLECT THE FEDERAL APPEALS COURT STAY

A. MOST FAVORED NATION CLAUSE

Q. IN YOUR OPINION, IS THE FCC ORDER CONSISTENT WITH THE OBJECTIVES AND PROVISIONS OF THE ACT IN PROMOTING COMPETITION AND COOPERATION?

A. At its most fundamental level, the FCC Order vitiates the potential for cooperation among competing telecommunications companies, by imposing a mandatory "pick and choose" "most favored nation" (MFN) requirement into all interconnection agreements:

> Carriers may obtain any individual interconnection, service, or network element under the same terms and conditions as contained in any publicly filed interconnection agreement without having to agree to the entire agreement.[116]

Q. DOES THIS MFN PROVISION PROMOTE PRIVATE COOPERATIVE AGREEMENTS?

A Quite the contrary. The MFN provision of the FCC Order opposes economic principles underlying contract laws and eliminates the benefits of private negotiations, arbitrations and agreements. Although private agreements often include a "most favored nation" provision, the reciprocity, scope and application of the provision are subject to negotiation. The FCC Order allows any interconnecting company to "pick and choose" from among the individual terms of any other agreement filed with the state commission for approval, extracting those terms it favors, and leaving behind those which it does

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[116] FCC Order, paragraph 40.

not.[117] When another party is allowed to change the terms of an agreement after the agreement is reached, U S WEST is effectively required to provide something of value without any consideration in return.

Q. WHAT ARE THE ECONOMIC CONSEQUENCES OF SUCH "NON-MUTUAL" CONTRACTS IN TELECOMMUNICATIONS?

A The "pick and choose" MFN provision of the FCC Order makes it impossible for U S WEST to offer different terms and conditions to different firms. A competitive market for telecommunications is fundamentally incompatible with the sort of intrusive regulation and administratively-driven outcomes common to this industry for most of this century. The Act looks to replace administrative procedures and regulations with the private negotiations common in other competitive markets. Interconnection among competing carriers will vary significantly on many dimensions, including the nature of the commercial relationship; the form and technical means of their interconnection; the degree to which the parties are obligated to minimize their collective costs and the respective bearing of those costs; and the degree of collaboration and cooperation in traffic forecasting, network planning and systems operations.

Q. WHAT ARE THE ECONOMIC FUNCTIONS OF PRIVATE AGREEMENTS?

A. Private negotiated or arbitrated agreements serve an important function by allowing each party to make commitments or contractual arrangements that reflect the underlying commercial and technical differences among the firms with which they do business. Such differences are commonplace and readily observable, even within a single industry, where commercial and technical arrangements can vary significantly. The

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[117] FCC Order, Appendix B, § 51.809.

telecommunications industry is no different. The costs of interconnection services can vary substantially, depending on the behavior of the interconnecting parties and the technical means of interconnection. For example, the characteristics and costs of interconnecting a wireless network are different than interconnecting a cable TV network, which in turn is markedly different than interconnecting a SONET ring. These cost differences are the underlying reason why interconnection agreements should be reached through private negotiations. Each agreement should incorporate the myriad factors that affect the costs of network engineering, construction, maintenance and operations; the costs of designing, developing, and implementing operational support systems; and administrative and billing costs. These factors include traffic volume, the commitment duration, the length of advance notice, the reliability of traffic forecasts, the distribution of traffic, the potential need for network redesign (e.g., due to network customization or non-standardization) and the terms of payment (e.g., advance deposits, trade credit discounts, bonding and payment guarantees). The FCC Order undermines the ability of parties to tailor and adapt contract provisions to any particular compatibilities or synergies between them, or to any particular commercial interests of either party alone. Instead, the FCC Order induces standardized agreements that obviate the potential benefits of party-to-party negotiations. Indeed, it directly contradicts the successful experience under the Commission's Tariff 12 procedures, which allow large customers to negotiate individual contracts with IXCs for long distance services under terms and conditions that reflect those differing needs and interests.

B. COST STUDIES USED TO SET THE FCC PROXY PRICES DO NOT COMPLY WITH ECONOMIC PRINCIPLES OR FCC TELRIC COSTING METHODS

Q. DO THE COST STUDIES AND OTHER SOURCES CITED BY THE FCC AS THE BASES FOR ITS PROXY PRICES COMPLY WITH THE COSTING RULES SET FORTH IN THE ORDER AND LISTED ABOVE?

A. No. None of these studies and sources fully comply with proper TELRIC costing methods; consequently, they systematically underestimate TELRIC for the local loop, end office switching, and transport. I am familiar with many of the studies and state commission orders cited by the FCC Order as the basis for its proxy prices for loops, end office switching and tandem/transport.[118] Each of the studies cited by the FCC Order, and each of the studies underlying the state commission orders cited by the Order, violate several, if not all, of the FCC's prescribed requirements for estimating the TELRIC of unbundled network elements and call termination. It is not surprising that there was no cost evidence in the record that did comply fully with the FCC's prescribed TELRIC costing methods, since they are quite different, in several important respects, from commonly used TSLRIC costing methods. It is surprising, though, that the FCC would set proxy prices on the basis of cost studies that are substantially biased downward, i.e., these studies systematically understate the TELRICs of loops, end office switching and tandem switching. One or several of the cost studies underlying the FCC's proxy prices violate the Order's costing methods in the following ways:

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[118] Sources: Hatfield Model, Version 2.2, Release 1, (Hatfield Associates, Inc. March 1996); Update of the Hatfield Model, Version 2.2, Release 1 (Hatfield Associates, Inc., May 30, 1996); Maryland Commission Order No. 72348, Case No. 8548 Phase II, p. 28-32; "Incremental Cost of Local Usage," Brock Paper No. 3; Docket No. 96S-233T, Decision No. C96-655, Colorado Commission, June 21, 1996; Case No. U-10647, Michigan Commission, February 23, 1995; Order No. 96-188, Oregon Commission, July 19, 1996; Telecommunications Building Blocks, Cost Report, Oregon PUC Docket Nos. 94-0096/94-0117/94-0146/94-0301, Illinois Commission, April 7, 1995.

1. *Using highly unrealistic assumptions about the degree to which new technologies can be deployed in actual field conditions*, given U S WEST's existing facilities and network architecture, thereby violating the FCC rule that TELRIC costs should be based on existing network architecture. For example, the Hatfield Model assumes that an unrealistically high proportion of feeder facilities will be provided using digital loop carrier technology, substantially underestimating real world loop costs.[119] (For a more detailed critique of the Hatfield model see section VI.C. below)

2. *Using "optimal" engineering capacity of equipment and assuming "optimal utilization of that capacity*, violating the FCC rule that TELRIC costs should reflect reasonable "fill factors." The Illinois Commission Decision cited by the FCC Order uses fill factors of 95% for the local loop and tandem switching.[120] None of the studies takes into account all of the following factors which serve to reduce U S WEST's actual capacity utilization below levels which might appear optimal under a short term analysis of demand for telecommunications services: the effects of competition, state regulatory requirements which mandate that U S WEST maintain stand by capacity in order to be "ready-to-serve," or the FCC's unbundling requirements.

3. *Using historical or prescribed depreciation rates, in violation of the FCC rule requiring the use of economic depreciation rates.* Several of the studies, such as the Hatfield Model (for local loops) and the Illinois Commission Decision (for switch lives) have this flaw. None of the studies takes account of the effects of competition and the

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[119] Hatfield Model Documentation Version 2.2 Release 1, p 27.

[120] Discussion with Ameritech cost personnel.

FCC's unbundling requirements, which are likely to increase the economic rate of depreciation of U S WEST's network facilities.

4. *Using uneconomically low rates of return which are closer to state regulatory "authorized rates of return," than to the forward looking costs of capital prescribed by the FCC rules.* The Hatfield Model and the Illinois Commission Decision also fail to comply with this methodology.[121] None of the studies takes account of the effects of competition and the FCC's unbundling requirements, which will increase U S WEST's risk-adjusted cost of capital.

5. *Failing to attribute all of the costs that are caused by the production of network elements (i.e., they are estimates of Total Service Long Run Incremental Costs, rather than Total Element Long Run Incremental).* Hence, it is my understanding that there is a residual of unattributed costs in the studies underlying the Illinois, Michigan and Maryland Commission Decisions. This residual is in fact part of the TELRIC of one or another network element.

Other "incremental" studies cited by the FCC Order do not include all the costs which, in the long-run, are necessary for providing a given network element, violating the "total service" requirement for TELRIC costing. For example, the Brock/Mitchell incremental cost study of end office switching does not include real estate or buildings used for housing switches in its estimates of the cost of end office switching.[122] None of the

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[121] Hatfield Model Documentation Version 2.2 Release 1, p. 47. Illinois information from Discussion with Ameritech cost personnel.

[122] See Bridger M. Mitchell, Incremental Costs of Telephone Access and Local Use, RAND Corporation, July 1990, p. 32-36, for a discussion of the costs included in the Mitchell study of end office switching cited by Brock.

studies takes account of the effects of competition and the FCC's unbundling requirements, which will increase U S WEST's operating costs and the cost of providing unbundled network elements.

Additionally, none of the end office switching studies cited by the FCC Order includes the costs of providing vertical features in the end office switching TELRIC. The software required to provide vertical features (such as CLASS and custom calling features) costs millions of dollars to license, upgrade, and install. The studies cited by the FCC for the pricing of unbundled switching did not even attempt to measure these costs and the FCC does not attempt to estimate these costs, leaving these substantial costs associated with vertical switch features unrecovered.

Thus, none of the cost studies cited by the FCC complies fully with the FCC's rules for TELRIC costing methods. In each case, the deficiencies bias the cost estimates downward, by understating the difficulty of deploying "best available technology," overstating realizable fill factors, understating depreciation expense, understating the cost of capital, and not attributing all of the costs caused by the production of the network elements.

Q. ARE THERE OTHER FLAWS IN THE WAY THE FCC SET ITS DEFAULT PROXY PRICES FOR UNBUNDLED ELEMENTS?

A. Yes. The studies used as the basis for proxy prices did not include any allocation above incremental costs to recover joint or common costs, even though economic principles and the FCC Order prescribe that prices include such a markup. This failure, in combination with all the methodological flaws and downward biases in the respective cost studies, renders the proxy prices untenable and economically indefensible. Moreover, it would be

impossible to set the prices of unbundled network elements at FCC proxy prices because the FCC Order does not provide proxy prices for most of the network elements that the Order requires to be unbundled. For example, the Order requires that several different types of loops be unbundled, two-wire and four-wire, analog and digital. The costs of these various loop types are quite different. Yet the FCC Order only provides one proxy price for loops – presumably a two-wire analog loop. The Order also mandates the unbundling of network interface devices, signaling and call-related databases, operations support systems, operator service systems and directory assistance databases and facilities, but provides no proxy prices for any of these unbundled elements. As already noted, the Order declares vertical features to be part of the local switching element – even though it is clearly a service – yet the cost studies used as the basis for the proxy price of end office switching specifically exclude vertical features because they are not part of the basic switching function.

Fortunately, this Commission need not use the FCC proxy prices, because U S WEST has provided cost studies that fully comply with sound economic principles and the FCC's prescribed TELRIC costing methods. Since U S WEST's proposed prices of unbundled elements are based on those cost studies, the FCC's proxy prices should not be used to set the prices of U S WEST's unbundled network elements.

C. *FCC'S PROXY RESALE DISCOUNT*

Q. IS THE FCC ORDER CONSISTENT WITH THE RESALE PROVISIONS OF THE ACT?

A. No, it is not, for three reasons. First, the FCC's proxy wholesale discount of 17-25% is based on faulty economic logic and an unduly expansive definition of "costs that will be

avoided." Second, the FCC's proxy wholesale price discount requires an allocation of joint and common costs, which by definition are not avoidable and will not be avoided. Third, by ruling that ILECs may not place any restrictions on the use of discounted prices by resellers, the FCC Order allows for double-discounting, whereby the reseller can purchase services at an "avoidable cost" discount off an already discounted price.

Q. HOW DOES THE FCC ORDER DEFINE "COSTS THAT WILL BE AVOIDED"?

A. The FCC Order requires a different cost standard than the Act, by using the concept of "avoidable costs," which it defines as costs that should be avoided, in contrast to the Act, which requires that the wholesale discount be applied to costs that will be avoided. In applying this theoretically avoidable cost standard to develop a proxy wholesale price discount, the FCC Order relies largely on the claims of MCI regarding which specific ARMIS expense accounts are avoidable. Although the FCC Order rejects some of the most unfounded claims of MCI, the Order nevertheless makes some purely arbitrary judgments about how much of these expenses should be avoidable.

Q. IS THE FCC'S DEVELOPMENT OF "AVOIDABLE COSTS" CONSISTENT WITH ECONOMIC LOGIC AND EMPIRICAL EXPERIENCE?

A. No, it is not. The FCC Order merely assumes that many expenses of certain types (e.g., product management) are related to retailing and, therefore, should be avoidable when the ILEC sells its services at wholesale for resale. The Order offers no theoretical or empirical basis for these findings. In fact, many of the expenses the FCC Order declares to be avoidable will not be avoided, because the costs will be incurred in serving wholesale customers. Indeed, even today, many of the expenses in the accounts found by the FCC Order to be avoidable are incurred in the wholesaling of services (e.g., carrier access services); surely those costs will not be avoided. Moreover, many entrants have

already requested special services and/or higher quality services from U S WEST, which will impose costs that are not now incurred in serving retail customers.

Q. WHAT IS WRONG WITH THE FCC'S REQUIREMENT THAT THE WHOLESALE PRICE DISCOUNT INCLUDE AN ALLOCATION OF SHARED AND COMMON COSTS, IN ADDITION TO AVOIDABLE COSTS?

A. The Act requires that wholesale discounts reflect "costs that will be avoided" by U S WEST. In spite of that clear language, the FCC concludes that the wholesale discount should also include an allocation of U S WEST's shared and common costs,[123] which, by their very definition, will not be avoided when U S WEST sells its services to a reseller for resale. The FCC's proxy wholesale discount of 17-25% is therefore overstated due to this error. In spite of the logical flaw in the FCC's wholesale discount rule, the U S WEST avoided cost study includes a proportional allocation of shared and common costs.

Q. WHAT IS YOUR OPINION OF THE DEFAULT PROXY WHOLESALE DISCOUNTS ESTABLISHED BY THE FCC?[124]

A. There are two problems with the FCC proxy wholesale discount. First, as already noted, the FCC's proxy is arbitrary and based on an expansive definition of avoided costs. Second, the FCC Order only offers a single national proxy discount rate based on averages. By using such a proxy, one is applying a discount rate that is based on averages, compromises, or arbitrary assumptions about carrier costs in general, and

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[123] FCC Order, paragraph 918.

[124] FCC Order, paragraph 933.

applying that to a particular firm for whom those averages, compromises, and arbitrary assumptions may be entirely invalid.

Q. WHAT ARE THE EXPECTED ECONOMIC EFFECTS OF THE FCC'S REQUIREMENT TO INCLUDE AN ALLOCATION OF COMMON COSTS IN THE WHOLESALE DISCOUNT?

A. In practice, this requirement will not only induce inefficiencies, but will also lead to an inequitable allocation of responsibility for network costs. Removing allocation from the wholesale price does not create an added incentive to provide network services more efficiently, beyond the incentive under price cap regulation or competition itself. Instead, it puts pressure on U S WEST to recover its joint and common costs elsewhere in its business, since cost recovery is necessary simply to stay in business. U S WEST can attempt to recover the lost allocation by increasing prices at the retail level, but that is unlikely to succeed because the resellers will be able to undercut U S WEST's price. It can attempt to increase prices on those captive customers who have no competitive alternative, particularly those who are ignored by competition because of the rivals' incentives to cream skim. Low usage residential customers, who are likely to have the fewest competitive alternatives, will be asked to bear more than their share of the common costs of providing the network. If regulatory or competitive conditions prevent this avenue of cost recovery, a third alternative is that the shareholders of U S WEST bear the cost. In any event, U S WEST's customers and shareholders bear more than their share of providing the network, which is the true inequity; the resellers' customers are making use of the network, and benefiting from the common costs of providing it, just as much and just as surely as are U S WEST's own retail customers. It is only fair, as well as economically efficient, for the resellers' customers to contribute to the cost of providing the network as do U S WEST's customers.